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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,586	07/09/2002	Hidekazu Suzuki	2002-0384A	4888

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EXAMINER	
TRAN, TRANG U	
ART UNIT	**PAPER NUMBER**
2614	

DATE MAILED: 11/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/088,586	SUZUKI ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 October 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3 and 9* is/are pending in the application.

4a) Of the above claim(s) *4-8 and 10* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3 and 9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/9/02; 10/13/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of invention I, claims 1-3 and 9 in the reply filed on October 21, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

2. Claims 4-8 and 10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on October 21, 2005.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because the abstract exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. Correction is required. See MPEP § 608.01(b).

Drawings

5. Figure 26 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-3 and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 8 of copending Application No. 10/130,694 in view of the admitted prior art (Fig. 26, pages 1-2 of the Specification).

In considering claim 1, claim 8 of copending Application No. 10/130,694 discloses all the claimed subject matter, note 1) the claimed a time-base compression means for time-base-compressing a first signal and multiplexing the first signal; 2) the claimed a signal multiplexing means for multiplexing the second signal and a third signal, employing the multiplexing control signal generated by the multiplexing control signal generator, and outputting a multiplexed signal, and 3) the claimed a signal transmitting means for transmitting the multiplexed signal and the multiplexing control signal to the signal receiver.

However, claim 8 of copending Application No. 10/130,694 explicitly does not disclose the claimed a multiplexing control signal generator for generating a multiplexing control signal on the basis of a second signal.

The admitted prior art (Fig. 26, pages 1-2 of the Specification) teaches that a DE (Data Enable) signal is a signal indicating a period during which the component signal such as RED, GREEN, and BLUE signal exists, and this is a HIGH active signal, for example, the DE signal is LOW in a period of a horizontal synchronizing signal or vertical synchronizing signal of video.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the multiplexing control signal generator as taught by the

admitted prior art (Fig. 26, pages 1-2 of the Specification) into claim 8 of copending Application No. 10/130,694 in order to simplify the process of transmitting digital video signal and the digital audio signal through the use of a few number of cables.

Claim 2 is rejected for the same reason as discussed in claim 1 above.

In considering claim 3, note 1) the claimed the first signal is an audio signal is met by claim 8 of copending Application No. 10/130,694, 2) the claimed the second signal is a horizontal synchronizing signal or a vertical synchronizing signal is met by the multiplexing the blue signal and the HSYNC, VSYNC (Fig. 26, pages 1-2 of the Specification of the admitted prior art), and 3) the claimed the third signal is a video signal is met by claim 8 of copending Application No. 10/130,694.

Claim 9 is rejected for the same reason as discussed in claim 3 above.

This is a provisional obviousness-type double patenting rejection.

8. Claims 1-3 and 9 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 10/149,309 in view of the admitted prior art (Fig. 26, pages 1-2 of the Specification).

In considering claim 1, claim 1 of copending Application No. 10/149,309 discloses the claimed a time-base compression means for time-base-compressing a first signal and multiplexing the first signal, and a signal multiplexing means for multiplexing the second signal and a third signal, employing the multiplexing control signal generated by the multiplexing control signal generator, and outputting a multiplexed signal.

However, claim 1 of copending Application No. 10/149,309 explicitly does not disclose the claimed a multiplexing control signal generator for generating a multiplexing control signal on the basis of a second signal and a signal transmitting means for transmitting the multiplexed signal and the multiplexing control signal to the signal receiver.

The admitted prior art (Fig. 26, pages 1-2 of the Specification) teaches that a DE (Data Enable) signal is a signal indicating a period during which the component signal such as RED, GREEN, and BLUE signal exists, and this is a HIGH active signal, for example, the DE signal is LOW in a period of a horizontal synchronizing signal or vertical synchronizing signal of video ...and the video signals, the CTL signals and the DE signals are also encoded, serialized, and transmitted to the transmission line.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the multiplexing control signal generator and the transmission line as taught by the admitted prior art (Fig. 26, pages 1-2 of the Specification) into claim 1 of copending Application No. 10/149,309 in order to simplify the process of transmitting digital video signal and the digital audio signal through the use of a few number of cables.

Claim 2 is rejected for the same reason as discussed in claim 1 above.

In considering claim 3, note 1) the claimed the first signal is an audio signal is met by claim 1 of copending Application No. 10/149,309, 2) the claimed the second signal is a horizontal synchronizing signal or a vertical synchronizing signal is met by the multiplexing the blue signal and the HSYNC, VSYNC (Fig. 26, pages 1-2 of the

Specification of the admitted prior art), and 3) the claimed the third signal is a video signal is met by claim 1 of copending Application No. 10/149,309.

Claim 9 is rejected for the same reason as discussed in claim 3 above.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art (Fig. 26, pages 1-2 of the Specification) in view of Matsunaka Shinji et al (JP Publication No. 06-078280).

In considering claim 1, the admitted prior art (Fig. 26, pages 1-2 of the Specification) discloses all the claimed subject matter, note 1) the claimed a multiplexing control signal generator for generating a multiplexer control signal on the basis of a second signal is met by the DE (data enable) signal (Fig. 26, pages 1-2 of the Specification), 2) the claimed a signal multiplexing means for multiplexing the second signal and a third signal, employing the multiplexing control signal generated by the multiplexing control signal generator, and outputting a multiplexed signal is met by the TMDS-encoders/serializers 2601-2603 which multiplex the video signal and control signals (Fig. 26, pages 1-2 of the Specification), and 3) the claimed a signal transmitting

means for transmitting the multiplexed signal and the multiplexing control signal to the signal receiver is met by the transmission lines (Fig. 26, pages 1-2 of the Specification).

However, the admitted prior art (Fig. 26, pages 1-2 of the Specification) explicitly does not specification disclose the claimed a time-base compression means for time-base-compressing a first signal and multiplexing the first signal.

Matsunaka Shinji et al teach that a transmission section T applies time base compression to a digital audio signal and the result is mixed in a digital video signal so as to be inserted in a horizontal synchronization tip period, the mixed digital video/audio signal is parallel/serial converted and the converted signal is sent to a reception section R through one cable 5 (see the abstract and Fig. 1, [0022]-[0029]).

Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention to incorporate the time base compression to a digital audio signal and transmitting the mixed (multiplexed) digital video/audio signal as taught by Matsunaka Shinji et al into the admitted prior art (Fig. 26, pages 1-2 of the Specification)'s system in order to provide a transmission method for a digital video signal and a digital audio signal with a simple configuration and simplify the process of transmitting digital video signal and the digital audio signal through the use of a few number of cables.

Claim 2 is rejected for the same reason as discussed in claim 1 above.

In considering claim 3, note 1) the claimed the first signal is an audio signal is met by the digital audio signal (see the abstract and Fig. 1, [0022]-[0029] of Matsunaka Shinji et al), 2) the claimed the second signal is a horizontal synchronizing signal or a vertical synchronizing signal is met by the multiplexing the blue signal and the HSYNC,

VSYNC (Fig. 26, pages 1-2 of the Specification of the admitted prior art), and 3) the claimed the third signal is a video signal is met by the video signal (RGB) (Fig. 26, pages 1-2 of the Specification of the admitted prior art).

Claim 9 is rejected for the same reason as discussed in claim 3 above.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nguyen (US Patent No. 6,839,055) discloses video data error detection.

Seccia (US Patent No. 6,388,717 B1) discloses digital television transmitting system having data and clock recovering circuit.

Murata (US Patent No. 6,009,305) discloses digital video signal multiplex transmission system.

Iwami et al. (US Patent No. 5,857,056) disclose information recording and reproducing apparatus.

Taniguchi et al. (US Patent No. 5,929,921) disclose video and audio signal multiplex sending apparatus, receiving apparatus and transmitting apparatus.

Birch et al. (US Patent No. 5,757,416) disclose system and method for transmitting a plurality of digital services including imaging services.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang U. Tran whose telephone number is (571) 272-7358. The examiner can normally be reached on 8:00 AM - 5:30 PM, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TT
November 18, 2005

Trang U. Tran
Examiner
Art Unit 2614